AMENDMENTS TO THE CLAIMS

1 - 16 (Canceled)

17. (New) A valve for controlling flow rate and/or pressure comprising:

a valve body defining an inlet, an outlet, and a seat;

a first valve member moveable between a first valve member closed position and a first valve member open position, wherein at least a portion of the first valve member is in contact with the seat in the first valve member closed position, and the at least a portion of the first valve member is spaced a predetermined distance from the seat when the first valve member is in the first valve member open position; and

a piezoelectric portion for receiving a voltage, wherein at least a portion of the piezoelectric portion is moveable relative to the valve body, and wherein the piezoelectric portion is a ring disc.

18. (New) The valve of claim 17, wherein at least a portion of the first valve member is moveable generally parallel to an axis of the piezoelectric portion.

19. (New) The valve of claim 17, further comprising a first needle coupled to the piezoelectric portion, wherein the valve body is further defined by a first port, a low pressure chamber, and a high pressure chamber, the first needle portion is moveable between a first needle open position and a first needle closed position, at least a portion of the first needle portion is in contact with at least a portion of the first port when the first needle is in the first needle closed position, thereby defining a first boundary between the low pressure chamber and the high pressure chamber, and wherein the first valve member, in the first valve member closed position, defines a second boundary between the low pressure chamber and the high pressure chamber.

20. (New) The valve of claim 19, wherein the first needle is coupled generally coaxially to a central portion of the piezoelectric portion.

21. (New). The valve of claim 19, further comprising a restriction part interposed between the first valve member and the first needle, wherein the restriction part includes a

restricted passageway, and wherein the restricted passageway provides a restricted flow area that is less than a first port flow area when the first needle is in the first needle open position.

22. (New) The valve of claim 19, wherein the first needle includes a body portion and a needle portion, and the body portion is positioned within the low pressure chamber.

23. (New) The valve of claim 19, further comprising a spring exerting a biasing force to bias the first needle toward the first needle closed position.

24. (New) The valve of claim 19, wherein at least a portion of the first valve member defines a portion of the high pressure chamber.

25. (New) The valve of claim 17, wherein the valve body further defines a first valve member abutment, and wherein at least a portion of the first valve member contacts at least a portion of the first valve member abutment when the first valve member is in the first valve member open position.

26. (New) The valve of claim 17, wherein the first valve member is defined by an axial cavity formed therein.

27. (New) The valve of claim 26, wherein the first valve member is further defined by a passageway connecting the cavity in fluid communication with the inlet.

28. (New) The valve of claim 17, wherein the first valve member is coupled to the piezoelectric portion for moving the first valve member between the first valve member open position and the first valve member closed position.

29. (New) The valve of claim 17, wherein the piezoelectric portion is positioned in the low pressure chamber.

30. (New) The valve of claim 17, wherein the first valve member is in the first valve member closed position when the voltage is about zero.

31. (New) The valve of claim 17, wherein the piezoelectric portion is configured such that it has a concavity directed towards the first needle portion when the voltage is about zero.

32. (New) The valve of claim 17, further comprising a plurality of apertures formed in the piezoelectric portion.

33. A valve comprising:

a valve body defining an inlet, an outlet, and a seat;

a first valve member moveable between a first valve member closed position and a first valve member open position, wherein at least a portion of the first valve member is in contact with the seat when the first valve member is in the first valve member closed position, and the at least a portion of the first valve member is spaced a predetermined distance from the seat when the first valve member is in the first valve member open position; and

a piezoelectric portion, wherein at least a portion of the piezoelectric portion is moveable relative to the valve body,

wherein the first valve member is further defined by a cavity in fluid communication with the inlet, the valve body is further defined by a low pressure chamber portion and a high pressure chamber portion, the first valve member, when in the first valve member closed position, defines a boundary between the low pressure chamber and the high pressure chamber, and wherein the low pressure chamber is in fluid communication with the high pressure chamber when the first valve member is in the first valve member open position.

34. (New) The valve of claim 33, wherein the piezoelectric portion is a disc having a first surface, and wherein at least a portion of the first surface is selectively deformed as the first valve member moves relative to the valve body.

35. (New) The valve of claim 34, wherein a voltage is applied to the piezoelectric portion to deform the at least a portion of the first surface.

36. (New) The valve of claim 33, wherein the first valve member selectively moves between the first valve member closed position and the first valve member open position as a result of deformation of the piezoelectric portion.